CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SOURCE: [redacted]

The following model designations for transformers and induction coils produced in East Germany were allegedly extracted from TBt 3200 (sic):

1. Designations of type and use

The letters indicate the initial letters of the word typifying the apparatus; for example:

D - Three-phase (alternating current)
R - With built-in regulating switch working under load
U - With built-in no-load adjustable two-way switch
Q - For mercury vapor converter
F - Outdoor use
O - Use in furnace installations

The whole consists of a stem designation, a supplemental designation, and a designation of the intended use.

Example: JD RQF = AC core with embedded yokes for self-ventilation, with built-in load switches, for mercury-vapor converter, for outdoor use.

When different kinds of current are concerned, the corresponding letter appears at the end of the stem designation.

The dry type is designated by the letter "L" in front of the current designation.

Induction coils with split iron cores have the same designations as transformers, but the designations are preceded by the letter "D".

Example: DJW. The "D" is omitted with ground-connected coils.

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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

The kind of core construction is indicated by the following designations:

JD and JW transformers, instead of embedded yokes, have the old GD and DW kind with stub faces.

The letter "J" is omitted with water-cooled or compressed-air-cooled transformers with embedded yokes.

If there are various coil load-regulators, the letter "R" is repeated.

Example: JDRRF

New designations for intended uses are:

M - Transformers or coils for Marx converters
O - Furnace installations
Q - Mercury vapor converters
X - Coils for smoothing installations
Y - High frequency apparatus

Example: JDRO = AC oil transformer with load governor for furnace installations.

Core (funnel shell) type designations indicate the number of legs (Schenkel) by III, IV, or V, preceded by the appropriate core-designation.

Examples: KW / III, KD / V.

2. Designations of model size

The model size is designated basically according to the electric factor: power in KVA and voltage in KV.

Numerical designations: 1 - Reinforced winding
2 - Aperiodic (oscillation-free) winding
3 - Harmonic vibration compensation
4 - Harmonic vibration-free winding
These numbers are added to the power figure.

Core sizes: Ø - Core diameter
M - Leg measure, center to center
L - Length of leg (Schenkel)
Jv - Yoke amplification in %

Example of a complete designation of a transformer: JD RUF 10001 / 45.

J - Core with embedded yokes for self-ventilation
D - Alternating current
R - Regulator
U - Two-way switch
F - Outdoor use
10001 - Power in KV plus numerical key number
45 - Rated voltage in KV

3. Meaning of symbols according to their position, left or right in the type designation:

Symbol	Position Left	Position Right
A	Starting transformer with built-in switch	Starting transformer with a manual switch
B	Locomotive transformer (BT)	Concrete support with reactance
C	Transformer	Overload safety equipment
D	Induction coil with iron bushing (current transformer) differential shield.	Alternating current
E	Ground connection safety device	Ground connection safety device
F	---	Outdoor installation
G	Self-ventilating OS, TS Yokes blunt	Mine transformer, not protected against firedamp
H	Standard universal transformer	Auxiliary transformer for differential protection
J	Self-ventilating OS, TS Yokes embedded	---
K	Oil and/or water circulatory cooling	Contact (dry) rectifier
L	Type in air without oil	---
M	Shell type	Marx converter
N	Nominal = or normal	N-angle core
O	Oil insulation (with instrument transformer)	Furnace transformer
P	Separate ventilation of nozzles (Duesen) or grill by compressed air	Porcelain (with instrument transformer)
Q	Quartz	Mercury vapor converter
R	Built-in regulating switch working under load, with autotransformer	Built-in regulating switch working under load, with power transformer
S	Special series, standard type	Reactance with flat coils
Sch	---	Protected against firedamp
T	Plunger (telescoping coil) transformer	Built-in no-load-actuated switch (obsolete current transformer)
V	Potential transformer (voltage) Instrument transformer	V-switching
W	---	Single-phase alternating current
X	---	With smoothing equipment
Y	---	High frequency apparatus
Z	---	Two-phase current